

Physical Evidence Bulletin

Blood Alcohol

Urine as a Sample for Alcohol Determination

Purpose

The Physical Evidence Bulletin (PEB) is a guideline intended for law enforcement agencies to follow in order to submit evidence to BFS Laboratories. PEBs are not intended to be used in lieu of training in the collection of evidence.

Analysis and results that may be obtained

The Bureau of Forensic Services (BFS) provides analytical support to law enforcement agencies through the identification and quantitation of the amount of ethanol in biological samples. Samples that contain 0.08% or less alcohol may be sent to the BFS Toxicology laboratory for drug testing.

Introduction

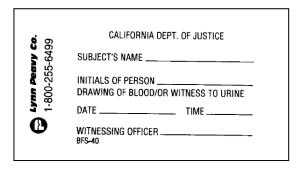
The degree of alcohol influence is based upon the amount of alcohol in the bloodstream. There is a direct correlation of alcohol in urine with alcohol in blood at a particular time. Therefore, urine can be used to determine a blood alcohol level. However, certain precautions must be taken.

Collection, marking, packaging and preservation of urine samples The following summarizes the important considerations in the collection and preservation of urine samples for alcohol analysis:

- In urine alcohol cases a <u>precaution</u> is necessary that is not an element in blood sample cases. The subject must first empty his or her bladder ("void"). After waiting at least 20 minutes, the analysis "sample" is collected. It is <u>important</u> to accurately note the <u>time</u> of the "void" and "sample" (if applicable) on the sample label and sample envelope.
- For urine samples, the "sample" is the most accurate measure of the blood alcohol concentration.
- When urine is submitted for alcohol analysis, the sample taken <u>after the first voiding</u> should be forwarded to the laboratory. Even if a small amount of urine is collected (5 cc or one teaspoon), it is sufficient for the determination of alcohol.
- A member of the police agency, preferably the arresting officer, should supervise the collection of the sample so there will be no question as to the source or that tap water might have been placed in the sample container.
- <u>Clean</u> containers with tight fitting screw caps can be provided by the laboratory for collecting urine samples. 750 mg of a dry preservative (sodium fluoride) has been

added to the containers provided by BFS.

• <u>Sample</u> containers shall be secured tightly, labeled with a BFS-40 (sample below) and sealed in a urine envelope (BFS-21).



CAUTIONS

- HAVE SUBJECT VOID. NOTE TIME.
- THEN, AFTER 20 MINUTES, TAKE ACTUAL <u>SAMPLE</u> FOR ANALYSIS. <u>NOTE TIME</u>. (<u>SAMPLE</u> may be analyzed for drugs in addition to alcohol.)
- SECURE CAPS TIGHTLY AND <u>LABEL</u> CONTAINERS AND ENVELOPE CORRECTLY.
- INVERT SEVERAL TIMES TO MIX.

For further information and additional resources

Please contact your regional BFS laboratory with any further questions that you may have.

For a list of regional laboratories go to: http://ag.ca.gov/bfs/pdf/bfs brochure.pdf or http://ag.ca.gov/bfs/

To locate the most current Physical Evidence Bulletins please go to: http://ag.ca.gov/cci/reference/reference.php#peb

If drugs are suspected please refer to Physical Evidence Bulletin #8 (Toxicology – Blood or Urine) for specific requirements of submission of samples to the Toxicology laboratory.